IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-33 (Canceled)

34. (Currently Amended) An *in vitro* method for detection of ~~cancer~~ carcinoma in an individual comprising:

a. obtaining a suspected cancerous biological tissue sample from an individual;

b. detecting in said suspected cancerous biological tissue sample obtained from said individual the level of polynucleotides having the nucleic acid sequence of SEQ ID NO:1 ~~contacting said sample with a probe specific for a transketolase like-1 gene nucleic acid sequence, wherein said probe has a sequence that is at least 80% identical to a part of at least 15 consecutive nucleotides of SEQ ID NO:1 or is complementary or reverse complementary to such a part and wherein said probe hybridizes under stringent conditions to SEQ ID NO: 1 but does not hybridise to an other transketolase or transketolase like sequence~~;

c. obtaining a normal control sample of the same type tissue as [[as]] the suspected cancerous biological tissue but known to be non-cancerous ~~and contacting said normal control sample with said probe specific for a transketolase like-1 gene nucleic acid sequence~~;

d. ~~detecting in said suspected cancerous biological tissue sample obtained from said individual the level of polynucleotides that hybridized;~~

~~e.~~ detecting in said normal control sample the level of polynucleotides having the nucleic acid sequence of SEQ ID NO:1 ~~that hybridized~~;

e. [[f.]] comparing said detected level of ~~hybrized~~ polynucleotides from said suspected cancerous biological tissue sample to the level of ~~hybridized~~ polynucleotides in the normal control sample; and

f. [[g.]]in the case that a higher level of polynucleotides having the nucleic acid sequence of SEQ ID NO:1 is detected in said suspected cancerous biological tissue sample as compared to said level of polynucleotides in said normal control sample, diagnosing said individual as having a ~~cancer or precancerous condition~~ carcinoma.

35. (Canceled)

36. (Currently Amended) The method according to claim 34 [[35]], wherein the ~~cancer~~ carcinoma is colon cancer, lung cancer, gastric cancer or pancreatic cancer.

37. (Canceled)

38. (Currently Amended) The method according to claim 34 ~~37, wherein the biological test sample is serum, urine, semen, stool, bile, a biopsy or a cell- or tissue sample~~ wherein in step (b) the detection is carried out by using a probe.

39 - 44. (Canceled).

45. (Currently Amended) The method according to claim 38 [[44]], wherein the probe is detectably labeled.

46. (Previously Presented) The method according to claim 45, wherein the label is selected from the group consisting of a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, and an enzyme.

47. (Previously Presented) The method according to claim 34, wherein step (d) comprises using a nucleic acid amplification reaction.

48. (Previously Presented) The method according to claim 47, wherein the amplification reaction is selected from the group consisting of PCR, LCR and NASBA.

49. (Currently Amended) The method according to claim 38 [[44]], wherein step (b) comprises hybridizing ~~the~~ at least one nucleic acid probe in-situ.

50. (Currently Amended) The method according to claim 34, wherein at least one of steps (d) and (e) [[(f)]] comprises performing in vitro molecular imaging.

51 - 69. (Canceled)

70. (Previously Presented) The method according to claim 34, wherein said transketolase-like1 gene is as given in NCBI Accession No. X 91817.

71. (Currently Amended) An *in vitro* method for detection of ~~cancer~~ carcinoma in an individual comprising:

(a) obtaining a biological tissue sample suspected to contain cancerous cells from an individual;

(b) detecting in said biological tissue sample obtained from said individual the level of polynucleotides having the nucleic acid sequence of SEQ ID NO:1 ~~contacting the tissue sample from step (a) with a probe specific for a transketolase-like-1 gene nucleic acid sequence, wherein said probe has a sequence that is at least 80% identical to a part of at least 15 consecutive nucleotides of SEQ ID NO:1 or is complementary or reverse complementary to such a part and wherein said probe hybridizes under stringent conditions to SEQ ID NO: 1 but does not hybridise to an other transketolase or transketolase like sequence~~;

(c) ~~detecting in said biological tissue sample obtained from said individual the level of polynucleotides that hybridized;~~

~~(d)~~ comparing the results of step (b) ~~(c)~~ with a reference value obtained by detecting, in ~~contacting~~ a normal control sample of the same type as the suspected cancerous biological tissue sample but known to be non-cancerous, ~~with said probe specific for a transketolase-like-1 gene nucleic acid sequence and detecting~~ the level of ~~hybrized~~ polynucleotides having the nucleic acid sequence of SEQ ID NO:1; and

(d) ~~(c)~~ in the case that a higher level of polynucleotides is detected in said suspected cancerous biological tissue sample suspected to contain cancerous cells as compared to said level of polynucleotides in said normal control sample, diagnosing said individual as having a ~~cancer or precancerous condition~~ carcinoma.

72. (Currently Amended) An *in vitro* method for detection of ~~cancer~~ carcinoma in an individual comprising:

(a) obtaining a biological test sample ~~suspected to contain cancerous cells~~ from an individual suspected to be suffering of carcinoma, said test sample being selected from the group consisting of serum, blood, plasma, urine, semen, stool, bile, a biopsy or a cell- or tissue-sample, gastric juice, and pancreatic juice;

(b) detecting in said biological test sample obtained from said individual the level of polynucleotides having the nucleic acid sequence of SEQ ID NO:1 ~~contacting said biological test sample with a probe specific for a transketolase like-1 gene nucleic acid sequence, wherein said probe has a sequence that is at least 80% identical to a part of at least 15 consecutive nucleotides of SEQ ID NO:1 or is complementary or reverse complementary to such a part and wherein said probe hybridizes under stringent conditions to SEQ ID NO: 1 but does not hybridise to an other transketolase or transketolase like sequence~~;

(c) ~~detecting in said biological test sample the level of polynucleotides that hybridized;~~

~~(d)~~ comparing the results of step (b) ~~(c)~~ with a reference value obtained by detecting, in ~~contacting~~ a normal control sample of the same type and, in the case of tissue, of the same tissue type, as the ~~suspected cancerous biological~~ test sample but known to be non-cancerous, ~~with said probe specific for a transketolase like-1 gene nucleic acid sequence and detecting~~ the level of ~~hybrized~~ polynucleotides having the nucleic acid sequence of SEQ ID NO:1; and

(d) [[(e)]] in the case that a higher level of polynucleotides is detected in said ~~suspected cancerous~~ biological test sample as compared to said level of polynucleotides in said normal control sample, diagnosing said individual as having a ~~cancer or precancerous condition~~ carcinoma.

73. (new) An *in vitro* method for detection of carcinoma in an individual comprising:

(a) obtaining a suspected biological carcinoma tissue sample from an individual;

(b) detecting in the tissue sample obtained from said individual the level of polynucleotides comprising SEQ ID NO:1;

(c) comparing the level detected in step (b) with the level of polynucleotides comprising SEQ ID NO:1 in a corresponding control tissue sample from a healthy subject; and

(d) in the case that the tissue sample from the individual has a higher level of polynucleotides comprising SEQ ID NO:1 than the control tissue sample, diagnosing said tissue sample as indicative of a carcinoma tissue.